

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of

Improving Public Safety Communications
In the 800 MHz Band

Consolidating the 900 MHz Industrial/Land
Transportation and Business Pool Channels

WT Docket No. 02-55

To: The Commission

**COMMENTS OF THE
SATELLITE INDUSTRY ASSOCIATION**

The Satellite Industry Association (“SIA”)¹ hereby submits these comments pursuant to section 1.415 of the Commission’s rules, 47 C.F.R. §1.415, and in response to the Federal Communications Commission’s (“FCC” or “Commission”) request for comments in the Notice of Proposed Rulemaking in the above referenced proceeding.²

¹ SIA is a national trade association representing the leading U.S. satellite manufacturers, service providers, and launch service companies. SIA serves as an advocate for the U.S. commercial satellite industry on regulatory and policy issues common to its members. With member companies providing a broad range of products and services, SIA represents the unified voice of the U.S. commercial satellite industry. SIA’s members include: ASTROLINK International LLC; The Boeing Company; SES Americom; Globalstar, L.P.; Hughes Electronics Corp.; Lockheed Martin Corp.; Loral Space & Communications Ltd.; Motient Corp.; PanAmSat Corporation; Teledesic Corporation; and TRW Inc.

² Improving Public Safety Communications in the 800 MHz Band, Consolidating the 900 MHz Industrial/Land Transportation and Business Pool Channels, *Notice of Proposed Rulemaking*, 17 FCC Rcd 4783 (2002) (“*NPRM*”).

I. INTRODUCTION

SIA recognizes the need to protect Public Safety services from interference in the 800 MHz band. In developing a solution for 800 MHz interference, however, no reason exists for the Commission to consider a disruption of the 2 GHz Mobile Satellite Service (“2 GHz MSS”) spectrum allocation. 2 GHz MSS networks have the potential to provide competitive telecommunications services to rural and remote areas that are underserved by terrestrial operators. 2 GHz MSS networks can also provide emergency communications services that can continue to function despite major disruptions to other types of telecommunications networks.

The Commission has been presented with a number of options to help resolve interference in the 800 MHz band. Only one of these proposals includes a reallocation of 2 GHz MSS spectrum and this proposal is clearly the most burdensome and ineffective approach that has been developed in an effort to accomplish the Commission’s combined goals in this proceeding. Furthermore, the continued consideration by the Commission of requests for 2 GHz spectrum reallocation is undercutting the ability of MSS licensees to develop these new MSS systems. Therefore, the Commission should remove from further consideration in this proceeding the possibility of a reallocation of 2 GHz MSS spectrum.

II. THE COMMISSION SHOULD FURTHER THE PUBLIC INTEREST BY CONCLUDING EXPEDITIOUSLY THAT 2 GHz MSS SPECTRUM WILL NOT BE USED TO HELP RESOLVE INTERFERENCE IN THE 800 MHz BAND.

In developing a means to mitigate interference to Public Safety services in the 800 MHz band, the Commission has requested proposals that balance the need for sufficient spectrum for critical Public Safety communications with the goal of imposing minimal disruption to the

existing licensing structure.³ As Commissioner Kathleen Abernathy noted, a solution for Interference to Public Safety services should not result in imposition of significant costs to any one group of licensees or in disruption of licensees' plans due to relocation of parties into a host of other bands.⁴

In response to the Commission's request, industry groups and affected users have put forth a number of proposals to resolve the 800 MHz interference problem, while furthering the Commission's goal of minimizing disruption to licensees.⁵ Intensive industry cooperation and technical analysis were involved in the development of some of these proposals. In addition, the Commission developed its own alternative solution.⁶ Almost all of these plans manage to limit the disruption to incumbents, particularly the innocent bystanders, by confining the solution to a combination of the 700 MHz and 800 MHz bands.

In contrast, one proposal implicates spectrum users substantially outside of the 800 MHz frequency band. That proposal, which was submitted to the Commission by Nextel Communications, Inc. ("Nextel"), is the most burdensome and inequitable proposal currently pending before the Commission. Specifically, Nextel requested a reallocation of 10 megahertz of 2 GHz MSS spectrum, combined with a forced reorganization of spectrum users in the

³ See *id.* ¶ 2.

⁴ See Commissioner Kathleen Q. Abernathy, A Principled Approach to LMCC Spectrum Management, Address before the LMCC National Conference, Washington D.C. at 2 (Apr. 19, 2002) available at <http://www.fcc.gov/Speeches/Abernathy/2002/spkqa209.html>. ("Commissioner Abernathy's LMCC Remarks").

⁵ Proposals either have been offered, or are under development, by Nextel, the United Telecom Council ("UTC"), the Cellular Telecommunications and Internet Association ("CTIA"), Cingular Wireless LLC ("Cingular"), The National Association of Manufacturers/MRFAC, Inc. ("NAM/MRFAC"), and the Private Wireless Coalition.

⁶ See *NPRM* ¶¶ 26-27.

700 MHz, 800 MHz, and 900 MHz bands. The proposal suffers from the following shortcomings:

- It is clearly the most disruptive approach, forcing the relocation of a majority of 800 MHz spectrum users, and the reallocation of 2 GHz MSS spectrum that is necessary for 2 GHz MSS system expansion.
- It is also the most expensive approach, requiring the development and purchase of new equipment for licensees (including Nextel) in the 700 MHz, 800 MHz, and 900 MHz bands, along with expedited relocation of terrestrial incumbents in 2 GHz MSS spectrum shared by 2 GHz MSS licensees. These costs are expected to exceed greatly the money that Nextel has offered to assist the Public Safety service.
- It also proposes that relocation costs be borne by innocent non-interfering licensees, contrary to Commission policy precedent on imposition of such costs.
- It appears to be the most spectrally inefficient approach, requiring the imposition of a guard band of undetermined size in the 800 MHz band.⁷
- Finally, it may be an unavailable approach, because it depends on 2 GHz MSS spectrum, the disposition of which will hopefully be resolved before the 800 MHz proceeding is concluded.

With respect to this final point, several ongoing proceedings exist that could have an impact on the use of spectrum in the 2 GHz MSS band.⁸ In the *MSS Flexibility Proceeding*, the Commission proposed to allow MSS licensees in the 1.6/2.4 GHz, 2 GHz and L-bands to provide ancillary terrestrial services in conjunction with their licensed satellite services.⁹ In the

⁷ See *id.* ¶ 23.

⁸ See *id.* ¶ 52.

⁹ See Flexibility for Delivery of Mobile Satellite Services in the 2 GHz Band, the L-Band, and the 1.6/2.4 GHz Band; Amendment of Section 2.106 of the Commission's Rules to Allocate Spectrum at 2 GHz for Use by Mobile Satellite Service, *Notice of Proposed Rulemaking*, 16 FCC Rcd 15532, 15543 (2001) ("*MSS Flexibility Proceeding*").

Advanced Wireless Proceeding, the Commission is considering spectrum challenges to the 2 GHz MSS band that were filed by proponents of terrestrial wireless services.¹⁰

The Commission observed in its *NPRM* that these pending proceedings may be concluded before a solution can be reached in the 800 MHz proceeding.¹¹ Accordingly, proponents of 800 MHz reorganization should avoid reliance on a reallocation of 2 GHz MSS spectrum as a readily available option.

More importantly, no reason exists for the Commission to continue to consider a possible reallocation of 2 GHz MSS spectrum in this proceeding. The Commission has before it a significant number of carefully developed and minimally disruptive plans that can be utilized to help resolve interference to Public Safety services. Each of these plans addresses 800 MHz interference at lower costs and with less disruption than Nextel's wholesale reallocation proposal.

Therefore, the Commission should further the public interest by concluding immediately that reallocation of 2 GHz MSS spectrum will no longer be considered as an available option to help resolve interference problems at 800 MHz. The Commission should issue such a decision either as an initial order in this proceeding, or in a related proceeding. Regardless of the method used, however, the Commission should issue such a decision without delay because, as discussed

¹⁰ See Amendment of Part 2 of the Commission's Rules to Allocate Spectrum Below 3G for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, including Third Generation Wireless Systems; Amendment of Section 2.106 of the Commission's Rules to Allocate Spectrum at 2 GHz for Use By the Mobile-Satellite Service; The Establishment of Policies and Service Rules for the Mobile-Satellite Service in the 2 GHz Band, *Memorandum Opinion and Order and Further Notice of Proposed Rulemaking*, 16 FCC Rcd 16043, 16054-56 (2001) ("*Advanced Wireless Proceeding*").

¹¹ See *NPRM* at ¶60.

below, the mere consideration of this issue is causing severe disruption to the ongoing development of 2 GHz MSS systems.

III. THE COMMISSION'S CONSIDERATION OF 2 GHz MSS SPECTRUM REALLOCATION IS CAUSING IRREPARABLE HARM TO THE BUSINESS PLANS OF 2 GHz MSS LICENSEES.

In a little more than nine weeks, 2 GHz MSS licensees will reach their first milestone deadline and will be required to certify to the Commission that they have entered into non-contingent satellite manufacturing contracts. To achieve this milestone, 2 GHz MSS licensees must engage in negotiations with potential satellite manufacturers. As they further develop their systems and business plans, licensees must also enter into discussions with the financial community to secure sufficient funds to pay for the substantial costs of system construction. Making matters worse, the U.S. economy is in a downturn and investors are wary about new capital investments, particularly in the telecommunications sector, which the economic downturn has arguably hit the hardest.

At this critical juncture, 2 GHz MSS licensees do not need to have ongoing proceedings at the FCC that raise questions from potential investors about threats to their spectrum. This worst case scenario is exactly what is transpiring, however, and it is harming 2 GHz MSS licensees, regardless of the quality of their business plans or their long term forecasts for success.

2 GHz MSS applicants achieved a significant victory last year when the Commission granted their long-awaited licenses.¹² Some applicants had been working for a decade to secure

¹² See The Boeing Company, *Order and Authorization*, 16 FCC Rcd 13691(2001); Celsat America, Inc., *Order and Authorization*, 16 FCC Rcd 13712 (2001); Constellation Communications Holdings, Inc., *Order and Authorization*, 16 FCC Rcd 13724 (2001); Globalstar, L.P., *Order and Authorization*, 16 FCC Rcd 13739 (2001), ICO Services Limited, *Order and Authorization*, 16 FCC Rcd 13762 (2001); Iridium LLC, *Order and Authorization*, 16 FCC Rcd 13778 (2001); Mobile Communications Holdings, Inc., *Order and Authorization*, 16

authorizations. Along with an exhausting domestic allocation and licensing process, some applicants participated in four World Radiocommunications Conferences (starting with the 1992 World Administrative Radio Conference) in order to secure and defend international spectrum allocations. The process was both time consuming and very expensive, refuting any claim that 2 GHz MSS licensees are not fully committed to providing services.

Now that 2 GHz MSS licenses have been issued, however, the spectrum challenges are only increasing. Licensees have been forced in the last year to participate in multiple proceedings focused on reallocating portions of their spectrum. These proposals, regardless of whether they target “abandoned” or “expansion” spectrum, hinder the ability of 2 GHz MSS licensees to establish and maintain business plans that depend on an adequate source of spectrum capacity to succeed and grow their customer base. As 2 GHz MSS licensees have stressed repeatedly throughout each of these proceedings, without access to sufficient expansion spectrum, the business plans of 2 GHz MSS operators will be limited and further deployment of MSS networks will be stalled.

Importantly, however, the harm to these aspiring businesses will result not just from reallocations of 2 GHz MSS spectrum, but from the threat of reallocation as well. Compounding this inequity is the fact that these proceedings are unprecedented. For example, the Commission indicated in its *NPRM* that any reallocation of 2 GHz MSS spectrum would be based in part on a Commission finding that the reallocation “represented the highest and best use of the spectrum.”¹³ The *NPRM* fails to acknowledge adequately, however, that the Commission

FCC Rcd 13794 (2001); TMI Communications and Company, *Order*, 16 FCC Rcd 13808 (2001).

¹³ *NPRM* ¶ 57.

concluded only recently that the MSS service is the highest and best use of the spectrum.¹⁴ It is unreasonable to conclude that today, just five years after the Commission made its 2 GHz allocation and less than a year after the grant of 2 GHz MSS authorizations, the Commission's findings in this regard have changed.

As the Commission concluded when it allocated 2 GHz MSS spectrum, MSS networks provide a competitive option for mobile communications, particularly in underserved areas, such as in rural and remote communities where terrestrial mobile services are less feasible.¹⁵ Additionally, MSS networks provide a critical means of emergency communications during natural and other disasters, which render terrestrial communications systems unavailable for use.

No evidence exists that these public interest benefits are any less compelling today. Rural and remote communities, such as tribal lands and agricultural regions, are still critically in need of competitive wireless communications services. Furthermore, Public Safety services have developed a renewed realization that they need access to communications networks that can survive and function reliably in emergency situations.

The new 2 GHz MSS systems are clearly not the source of any interference problems that may have developed in the 800 MHz band and should not be harmed in an effort to find a solution. In light of the substantial public interest benefits that MSS communications networks can provide, and also recognizing the significant harm that this proceeding is imposing on 2 GHz

¹⁴ See *Amendment of Section 2.106 of the Commission's Rules to Allocate Spectrum at 2 GHz for Use by the Mobile-Satellite Service*, First Report and Order and Further Notice of Proposed Rulemaking, 12 FCC Rcd 7388, 7394 (1997) (“2 GHz MSS First Report and Order”), *aff'd on recon.*, Memorandum Opinion and Order and Third Notice of Proposed Rule Making and Order, 13 FCC Rcd 23949 (1998) (“2 GHz MSS Allocation Order”).

¹⁵ See *id.* at 7394-95.


MSS licensees, the Commission should concluded immediately that a reallocation of 2 GHz MSS spectrum will no longer be considered as an option in this proceeding.

IV. CONCLUSION

For the foregoing reasons, SIA respectfully requests that the Commission promptly issue an order that removes from consideration in this proceeding the possibility of reallocating 2 GHz MSS spectrum in an attempt to remedy interference in the 800 MHz band. The Commission's continued consideration of proposals to reallocate portions of the 2 GHz MSS band is unprecedented as a matter of Commission policy and is compromising the viability of 2 GHz MSS licensees at a critical time in the development of these new businesses.

Respectfully submitted,

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